



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/904,268

07/12/2001

Dennis L. Matthies

INTL-0572-US (P11417)

2031

7590

08/11/2004

Timothy N. Trop  
TROP, PRUNER & HU, P.C.  
STE 100  
8554 KATY FWY  
HOUSTON, TX 77024-1805

EXAMINER

ORTIZ, EDGARDO

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/904,268	<b>Applicant(s)</b> MATTHIES ET AL.	
	<b>Examiner</b> Edgardo Ortiz	<b>Art Unit</b> 2815	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims the limitation of “providing a layer *in* said first and second tiles to obscure said interface”. However, the specification does not support the claimed limitation. The specification discloses in page 7 lines 4-5 that the first and second tiles are, *overlaid* by the layer.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 16-21 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Greene et al. (U.S. Patent No. 5,661,531). With regard to Claim 1, Greene teaches a display panel (51) including a first display element (52) and a layer comprising on said panel including a central solid more transparent portion (58) and a peripheral less transparent solid portion (57). See figure 13.

Art Unit: 2815

With regard to Claim 2, Greene teaches a pair of abutting panels (54), including a gap (55) between said display panels and an obscuring region (57) situated over the gap (see figure 13 and column 10, lines 48-50).

With regard to Claim 3, Greene teaches a layer that is an integral piece including transparent and non-transparent regions, said non-transparent regions situated over the gap (55). See figure 13.

With regard to Claim 4, Greene teaches transparent and non-transparent regions formed integrally in the layer. See figure 13.

With regard to Claim 6, Greene teaches a non-transparent region that is rectangular. See figure 13.

With regard to Claim 16, Greene teaches abutting first and second display tiles (54) at an interface and providing a layer having a mask (57) to obscure an interface defined by gap (55). See figure 13.

With regard to Claim 17, Greene teaches securing first and second display tiles (54) to obscure an interface defined by gap (55). See figure 13.

With regard to Claim 18, Greene teaches applying a plate to form said tiles (54), said plate having substantially transparent (58) and substantially non-transparent regions (57) formed

Art Unit: 2815

therein and situating said non-transparent regions over an interface defined by gap (55). See figure 13.

With regard to Claim 19, Greene teaches forming said non-transparent regions integrally in said plate with said transparent regions. See figure 13.

With regard to Claim 20, Greene teaches forming reflective surfaces contained in surface layer (58) on the sides of the transparent regions.

With regard to Claim 21, Greene teaches forming a plate over said first and second tiles (54) and forming a rectangular non-transparent region (57) in said plate to obscure an interface defined by gap (55). See figure 13.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene et al.

(U.S. Patent No. 5,661,531) in view of Krusius et al. (U.S. Patent No. 6,005,649). With regard to Claim 5, Greene essentially discloses the claimed invention but fails to show the non-transparent made reflective. Krusius discloses a tiled flat panel display, which includes tiles

Art Unit: 2815

(102) separated by a gap (110) and reflective mirrors (108), which include a top surface (114) over the gap (see figure 6 and column 7, lines 13-16). Therefore, it would have been obvious to modify the structure as taught by Greene to include non-transparent regions which are made reflective, as suggested by Krusius, in order to provide non-transparent regions which reflect the light into the tiles of the display device.

With regard to Claim 6, Green teaches a non-transparent region that is rectangular. See figure 13.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Greene et al. (U.S. Patent No. 5,661,531). With regard to Claim 22, Greene teaches forming a plate over said first and second tiles (54) and forming a rectangular non-transparent region (57) in said plate to obscure an interface defined by gap (55).

However, Greene fails to show that the plate over the first and second tiles includes a triangular region. It would have been obvious to modify the structure as taught by Greene to include a plate having a triangular region, since this is merely one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing blockage to the transmitted light flux. A change in shape is generally recognizing as being within the level of ordinary skill in the art. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

***Response to Arguments***

3. Applicant's arguments have been fully considered but are not deemed persuasive for the reasons stated in the body of the office action. Applicant argues that "*Claim 1 calls for the transparent regions to be solid*", the examiner notes as stated in the rejection that Greene discloses a transparent portion (57) made of a mask (column 10, lines 57-61) which is a solid material. See figure 14. Therefore the claimed invention does not structurally distinguish over the structure as taught by Greene.

Applicant further argues regarding the 35 U.S.C. 112, second paragraph, rejection that layer 16 is "*provided in the first and second tiles to obscure the interface*" and refers to the specification at page 7, lines 11-14. However, the cited portion merely states that "*layers 10 and 12 may be integrated to a layer 16 for example by conventional bonding techniques including heat welding and adhesive bonding as two examples*". Thus, as noted above, the limitation of "*providing a layer in said first and second tiles to obscure said interface*" is not supported by the specification, which discloses in page 7 lines 4-5 that the first and second tiles are, *overlaid* by the layer.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

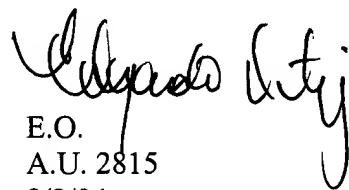
Art Unit: 2815


MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo Ortiz whose telephone number is 571-272-1735. The examiner can normally be reached on Monday-Friday (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571-272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
E.O.  
A.U. 2815  
8/8/04

  
GEORGE ECKERT  
PRIMARY EXAMINER